

CLAIMS

What is claimed is:

1. A method of diagnosing or prognosing a disease in an individual, comprising the steps of:

a) determining the level of expression of a gene in a blood sample of an individual,

5 and

b) detecting a difference of said level of expression of said gene in said blood sample according to step a) relative to the level of expression of the same gene of a control, wherein a difference in expression levels is indicative or predictive of said disease.

2. A method of diagnosing or prognosing a disease in an individual, comprising the steps of:

10 a) determining the level of expression of a gene in a blood sample of an individual;

and

b) detecting the same level of expression of said gene in said blood sample according to step a) relative to the level of expression of the same gene of a control, wherein the same level of expression is indicative or predictive of said disease.

15 3. The method of claim 1, wherein said control is a non-disease control.

4. The method of claim 2, wherein said control is a disease control.

5. The method of claims 1 or 2, wherein said control is from a blood sample of one or more individuals.

20 6. The method of claims 1 or 2, wherein said control is from a blood sample of one or more individuals undergoing treatment for a disease.

7. A method of identifying a disease marker, comprising the steps of:

a) determining the level of expression of a gene in a blood sample of an individual having a disease, wherein said gene is a candidate disease marker; and

b) comparing said level of said step a) with the level of expression of said gene in an individual not having said disease, wherein a difference in said levels identifies said candidate gene as a marker of said disease.

8. A method of identifying a disease marker, comprising the steps of:

5 a) determining the level of expression of a gene in a blood sample of an individual having a disease, wherein said gene is a candidate disease marker and said gene corresponds to a gene expressed in non-blood tissue; and

10 b) comparing said level of said step a) with the level of expression of said gene in an individual not having said disease, wherein a difference in said levels identifies said candidate gene as a marker of said disease.

9. A method of identifying a gene as marker for disease progression, comprising the steps of:

15 a) determining the level of expression of a gene in a blood sample of an individual having a symptom of a disease, wherein said gene is a candidate for determining disease progression; and

20 b) comparing said level of said step a) with the level of expression of a corresponding gene of an individual not having said symptom or having a different symptom, wherein a difference in said levels identifies said candidate gene as a marker of disease progression.

10. A method of identifying a gene as a marker for disease progression, comprising the steps of:

20 a) determining the level of expression of a gene in a blood sample of an individual having a symptom of a disease, wherein said gene is a candidate for determining disease progression and said gene corresponds to a gene expressed in non-blood tissue; and

25 b) comparing said level of said step a) with the level of expression of a corresponding gene of an individual not having said disease, wherein a difference in said levels identifies said candidate gene as a marker of disease progression.

11. A method of identifying a disease marker, comprising the steps of:

- a) determining the level of expression of a gene in a blood sample of an individual having a disease, wherein said gene is a candidate disease marker, and
- b) comparing said level of expression of said step a) with the level of expression of a corresponding gene of an individual not having said disease, wherein a lack of difference in said levels identifies said candidate gene as a non-marker of said disease.

5 12. A method of identifying a disease marker, comprising the steps of:

- a) determining the level of expression of a gene in a blood sample of an individual having a disease, wherein said gene is a candidate disease marker and said gene corresponds to a gene expressed in non-blood tissue; and

- 10 b) comparing said level of expression of said step a) with the level of expression of a corresponding gene of an individual not having said disease, wherein a lack of difference in said levels identifies said candidate gene as a non-marker of said disease.

13. The method of claims 1, 2, 7, 8, 9, 10 or 11, wherein said disease is selected from the group consisting of diabetes and coronary artery disease.

15 14. The method of claims 1, 2, 7, 8, 9, 10 11 or 12, wherein said disease is selected from the group consisting of hypertension, obesity, hyperlipidemia, diabetes, rheumatoid arthritis, depression, coronary artery disease, allergies, lung disease, osteoarthritis and bladder cancer.

15. The method of claims 1, 2, 7, 8, 9, 10 11 or 12, wherein said sample is RNA, cDNA or EST.

20 16. The method of claims 1, 2, 7, 8, 9, 10 11 or 12, wherein said blood sample is a drop of blood.

17. The method of claims 1, 2, 7, 8, 9, 10 11 or 12, wherein in said step a) said level of expression is determined for two or more genes.

25 18. The method of claim 1, 2, 7, 8 or 10, wherein said gene corresponds to a gene that is expressed in a non-blood tissue.